of *T. kachensis* confirms my field notes taken in various places of North, Central and South India (Brosset 1961 and 1962): monoestrous species, mating in early April and giving birth to one young during the first half of July.

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4. PRESENT STATUS OF THE EUROPEAN COMMENSAL BLACK RAT, *RATTUS RATTUS RATTUS* (LINN.) IN BOMBAY

During the rodent blood sample collection at Rat Destruction Establishment, B.M.C., Haffkine Institute, Bombay, it was observed that the collection included jet black silky soft furred rats, which were identified with the help of Ellerman (1961), as *Rattus rattus rattus* (Linn.) (Type species). This species is a commensal rodent form from Europe. Ellerman (1961) reported the collection of two specimens belonging to *R. r. rattus* (Linn.) from Bombay and concluded that being exotic species, the specimens might have come accidentally with sea cargo. However, our examination of the present day rodent collection from Greater Bombay, revealed the fact that this species was being trapped almost everyday from the port areas of Bombay city. The average everyday collection of this rat can roughly be calculated at 1%-2% of the total rodent collection from Greater Bombay.

Rattus rattus rattus (Linn.) thus, like its counterpart, *Rattus norvegicus* (Berken.), has been trying to establish itself in Bombay for sometime. However, it seems, the black rat, could not fully establish itself in the city. The reason may be that the Norway rat is more ferocious and can adjust to the change in habits and habitat. The present record also shows the collection of *R. norvegicus* (Berken.) from the distant suburbs of Greater Bombay indicating that this rat is, now, extending its distribution in the suburban areas as well.

Careful observations also showed the collection of both the sexes in different age groups varying from juvenile to adult (including pregnant) of *R. r. rattus* (Linn.), Thus the European black rat is not just an accidental visitor at this stage as Ellerman (1961) concluded then, but it has gained a footing in the new home and is trying to establish itself in the city. Similar survey of this rat from other port cities of India may throw some

light on its possible chances of survival in the changed habitat.

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5. THE BIOLOGY OF COLLARED PIKA, *OCHOTONA RUFESCENS*, WITH REFERENCE TO ORCHARDS OF BALUCHISTAN (PAKISTAN)

Methods and Materials

41 individuals were kill trapped (size 17.5× 9.5 cm) from orchards of Ziarat and Choatair (altitudes above 2300 m, sharing characteristic *Juniperus macropoda* forests) valleys during May and July, 1984. Each individual was weighed and sexed. Females were checked for plugged vagina, and uteri examined for pregnancy status. The number and weight of the embryo and number of the uterine scars was recorded. The activity of ovaries was judged on the basis of their visibility. The population levels were judged through trap success.

Results and Discussion

Table 1 presents the trap success exhibited by the different samples. The overall trap suc-

Table 1

Trap success in different sexes in the sample of *Ochotona rufescens* collected from Ziarat and Choatair during spring and summer

Locality	Spring			Summer			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Ziarat	5.00	3.61	1.39	3.06	2.78	0.28	4.14	3.28	0.86
Chaotair	6.47	4.04	2.43	1.25	1.25	0.00	3.64	2.73	0.91
Total	5.10	3.53	1.57	2.87	2.67	0.21	3.98	3.11	0.87